

**WHAT IS CLAIMED IS:**

1. A third shaft structure of a cursor input device comprising:

5 a base,

a circuit board,

a track ball mechanism; and

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a third shaft structure, comprising:

a support base having a coupling portion, a round-shaped groove, a scroll wheel shaft and an elastic arm; and

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a scroll wheel having the center thereof being disposed with a wheel shaft, an indented surface being disposed inside said scroll wheel;

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wherein said coupling portion, said round-shaped groove, said scroll wheel shaft and said elastic arm of said supporting base being integrally formed and being jointed with said scroll wheel by said scroll wheel interposing through said wheel shaft of the scroll wheel, said indented surface of said scroll wheel being for said elastic arm to prop against, so as to cause a segmented sensation as said scroll wheel being rotated upwards and downwards.

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2. The third shaft structure of the cursor input device as in claim 1, wherein a plurality of  $\sqcap$ -shaped channeling grooves are mounted on both sides of said coupling portion.

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3. The third shaft structure of the cursor input device as in claim 1, wherein the round-shaped groove is horizontally placed in-between said  $\sqcap$ -shaped channeling grooves on said coupling portion.

4. The third shaft structure of the cursor input device as in claim 3, wherein said

round-shaped groove is extended forward to form a scroll wheel shaft with two sides of the front end thereof being flattened respectively to form two flat surfaces.

5            5. The third shaft structure of the cursor input device as in claim 1, wherein said elastic arm has a fixed end and a free end, with said fixed end being connected to the top end of said round-shaped groove.

10           6. The third shaft structure of the cursor input device as in claim 5, wherein a protruding block is mounted at the front end of said free end, with both sides of said protruding block being formed as biased surfaces.

15           7. The third shaft structure of the cursor input device as in claim 1, wherein said indented surface has flanges and concave surfaces.